

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**Present Application:**

Applicant : Todd W. Seeley  
Title : huBUB3 GENE INVOLVED IN HUMAN CANCERS  
Docket No. : PP-01406.004 / 200130.438D1  
Date : February 27, 2002

**Prior Application:**

Examiner : Sumesh Kaushal Ph.D.  
Art Unit : 1633  
Application No. : 09/208,743

Box Patent Application  
Commissioner for Patents  
U.S. Patent and Trademark Office  
P.O. Box 2327  
Arlington, VA 22202

**PRELIMINARY AMENDMENT**

Commissioner for Patents:

Please amend the above-identified application as follows:

**In the Specification:**

Please replace the paragraph beginning at page 7, line 4, with the following rewritten paragraph:

--**Figure 3.** Alignment of related proteins *scBUB3*, *muBUB3*, *huBUB3* (2.7), *hu-rae1*, *rae-1* (*Schizosaccharomyces pombe*), *scYET7*, *scBUB3*, *hu-rae1*, *sp-rae1* and *scYET7* sequences were obtained from Genbank. The murine sequence is derived from Genbank entry U67327, corrected using overlapping murine EST entries for a reading frame error which

truncated the predicted reading frame at the C-terminus. Predicted WD40 repeat regions are indicated with roman numerals. Conserved residues are indicated below the alignments.--

In the Claims:

Please cancel claims 1-3 and 6-15 without prejudice.

Please add claims 42-48 as follows:

42. (New) An isolated huBUB3 polypeptide comprising amino acids at least 95% identical to a polypeptide comprising amino acids from about 1 to about 328 of SEQ ID NO:2.

43. (New) An isolated polypeptide wherein, except for at least one conservative amino acid substitution, said polypeptide has an amino acid sequence selected from the group consisting of:

(a) a polypeptide comprising amino acids from about 1 to about 328 of SEQ ID NO:2; and

(b) a polypeptide encoded by a polynucleotide at least 90% identical to the polynucleotide encoding (a).

44. (New) An epitope-bearing portion of the polypeptide of SEQ ID NO:2.

45. (New) The epitope-bearing portion of claim 44, which comprises about 8 to about 25 contiguous amino acids of SEQ ID NO:2.

46. (New) The epitope-bearing portion of claim 44, which comprises about 10 to about 15 contiguous amino acids of SEQ ID NO:2.

47. (New) An isolated antibody that binds specifically to the polypeptide of claim 42.

48. (New) An isolated antibody that binds specifically to a polypeptide of claim 43.

#### REMARKS

With entry of this Preliminary Amendment, claims 4, 5 and 16-47 are pending in this application. New claims 42 and 43 are supported by original claims 1-3 and in the specification at least at page 8, lines 22-25 (claim 42) and page 15, lines 11-14 (claim 43). Claims 44-48 are supported in the specification at least at page 8, lines 7-10 and page 12, lines 11-31 (claims 44-46) and page 31, lines 6-11 (claims 47 and 48). No new matter is added.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "**Version With Markings to Show Changes Made.**"

All of the claims remaining in the application are now clearly allowable. Favorable consideration and a Notice of Allowance are earnestly solicited.

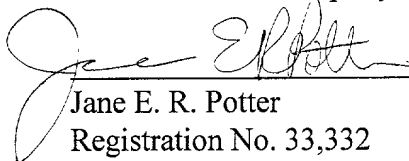


00500

PATENT TRADEMARK OFFICE

Respectfully submitted,

Seed Intellectual Property Law Group PLLC

  
Jane E. R. Potter  
Registration No. 33,332

(JEP:cew) #251222

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Specification:

The paragraph beginning at line 4 of page 7 has been amended as follows:

**Figure 3.** Alignment of related proteins *scBUB3*, *muBUB3*, *huBUB3* (2.7), *hu-rae1*, *rae-1* (*Schizosaccharomyces pombe*), *scYET7*, *scBUB3*, *hu-rae1*, *sp-rae1* and *scYET7* sequences were obtained from Genbank. The murine sequence is derived from Genbank entry U67327, corrected using overlapping murine EST entries for a reading frame error which truncated the predicted reading frame at the [N-terminus] C-terminus. Predicted WD40 repeat regions are indicated with roman numerals. Conserved residues are indicated below the alignments.

In the Claims:

Claims 1-3 and 6-15 have been canceled.

New claims 42-48 have been added.

(JEP:cew) #251222